

## WHAT IS CLAIMED IS:

- 1       1. A depolarization method comprising the step of selectively exposing a portion of a  
2       fabrication tool to a plasma for a selected time interval wherein said selected time interval  
3       has a duration sufficient to reduce a polarization of said portion of said fabrication tool  
4       whereby interference with a motion of a device being processed by said fabrication tool is  
5       not observed.
- 1       2. The method of claim 1 wherein said step of selectively exposing said portion of said  
2       fabrication tool includes selecting for exposing said portion of said fabrication tool at  
3       preselected intervals of time, and exposing said structure if interference with said motion of  
4       said device is observed.
- 1       3. The method of claim 2 further comprising the step of detecting said interference with  
2       said motion of said device.
- 1       4. The method of claim 3 wherein said step of detecting said interference with said  
2       motion comprises step of detecting a misalignment of said device with respect to said portion  
3       of said fabrication tool.
- 1       5. The method of claim 1 wherein said portion of said fabrication tool comprises an  
2       insulating pad.
- 1       6. The method of claim 1 wherein said plasma comprises a plasma formed from a noble  
2       gas.

1        7. The method of claim 6 wherein said noble gas is selected from the group consisting  
2        of xenon and argon.

1        8. The method of claim 1 further comprising the step of generating said plasma with a  
2        plasma flood gun.

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1        9. The method of claim 8 wherein said plasma flood gun includes an arc discharge.

1        10. The method of claim 9 wherein said arc discharge is struck between a hot filament  
2        cathode and an anode.

1        11. The method of claim 10 wherein said arc discharge has a voltage drop between said  
2        cathode and said anode of between ten and thirty volts.

1        12. The method of claim 8 wherein said step of exposing said portion of said fabrication  
2        tool comprises the step of positioning said portion of said fabrication tool in proximity to an  
3        aperture of said plasma flood gun.

1        13. The method of claim 1 wherein said preselected time interval is preselected from the  
2        range of five to ten minutes.

- 1        14. A depolarization process comprising the steps of:  
2              positioning an insulating pad in proximity to an aperture of a plasma flood gun  
3              (PFG);  
4              and exposing said insulating pad to a plasma from said PFG for a selected interval  
5              of time wherein said selected interval of time has a duration sufficient to reduce a  
6              polarization of said structure whereby interference with a motion of a device supported on  
7              said insulating pad is not observed.
- 1        15. The process of claim 14 wherein said plasma is formed from a noble gas.
- 1        16. The process of claim 15 wherein said noble gas is selected from a group consisting  
2              of xenon and argon.
- 1        17. The process of claim 14 further comprising the step of generating said plasma by  
2              striking an arc discharge in a gas supplied to said PFG.

1       18. A depolarization method comprising the step of selectively exposing a portion of a  
2       fabrication tool to a plasma for a selected time interval.

1       19. The method of claim 18 wherein said step of selectively exposing a said portion of  
2       said fabrication tool includes exposing said portion of said portion of said fabrication tool  
3       if interference with a motion of a device being processed in said fabrication tool is observed.

1       20. The method of claim 18 wherein said plasma comprises a plasma formed from a  
2       noble gas.

1       21. The method of claim 18 further comprising the step of generating said plasma with  
2       a plasma flood gun.

1       22. The method of claim 18 wherein said portion of said fabrication tool comprises an  
2       insulating pad.

1       23. The process of claim 19 wherein said interference with said motion of said device is  
2       indicated by a misalignment of said device with respect to said portion of said fabrication  
3       tool.

1       24. The process of claim 18 wherein said portion of said fabrication tool is in a vacuum  
2       region of said fabrication tool.